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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,645	05/01/2001	Charles L. Asbury	UW - Asbury	6607

7590 11/06/2002
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EXAMINER

VANORE, DAVID A

ART UNIT PAPER NUMBER

2881

DATE MAILED: 11/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Claims 1-18 in Paper No. 7 is acknowledged.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, 6, 10, 11, 12, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howie et al.

Howie et al. teaches a device for sample analysis comprising a polarized radiation source (2), a flow chamber (15), and a plurality of signal detectors (4, 17) arranged at a desired angle around the flow chamber (Note Fig. 3) as recited in claims 1, 6, 11, 12, and 13.

Given that Howie et al. teaches the placement of detectors to "surround the cell" (Col. 6 Lines 29-65), the detection apparatus of Howie et al. teaches that detectors may

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be placed at any orientation to the polarized radiation source and flow chamber including at 54.7 degrees from the direction of polarization or 35.3 degrees from the direction of polarization as recited in claims 5, 10, 11, 12, and 18.

It would have been obvious to one having ordinary skill in the art to select the optimum value of the position of the detectors because one of ordinary skill in the art would select the position of the detectors for the analysis of a desired scattered radiation.

Claims 2-4, 7-9, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howie et al. in view of Batchelder et al.

Howie et al. teaches all limitations as applied above, but does not teach the rearranging of the detector, flow cell, and light source such that the sample flow is orthogonal to a detector or radiation source, and that is parallel to a direction of polarization of the incident radiation.

Batchelder et al. teaches a flow cytometer comprising a polarized radiation source (10), a flow capillary (28), and detectors (52 and 54) where the direction of polarization is selectable to include being parallel to the flow trajectory, and the sample stream is orthogonal to the radiation source and detection means.

Batchelder et al. modifies the device of Howie et al. to produce a flow cytometer with selectable polarization states of incident radiation and a plurality of detection means to receive scattered radiation at a selected angle where the flow cell, radiation source and detection means are arranged as described above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Howie et al. with the device of Batchelder et al. because one of ordinary skill would have arranged the components of Howie et al. to achieve the optimum detection conditions. One of ordinary skill in the art would have known to select the polarization state relative to the direction of sample flow and arranged the detectors accordingly because Batchelder teaches this arrangement.

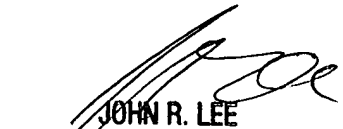
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Vanore whose telephone number is 703-306-0246. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Lee can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

dav
October 29, 2002


JOHN R. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800